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10/670,772	09/26/2003	Young-Hun Choi	1293.1856	4334

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EXAMINER

WALSH, DANIEL I

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/670,772

Applicant(s)

CHOI, YOUNG-HUN

Examiner

Daniel I. Walsh

Art Unit

2876

(Signature)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-21 is/are allowed.
- 6) ☒ Claim(s) 4-17 and 22-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Receipt is acknowledged of the Election received on 3 June 2005.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 4-17 and 23-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bilicich et al. (US 5,877,483) in view of Huang et al. (US 2003/0126483).

Re claim 4, Bilicich et al. teaches a card (20) containing personal information (col 3, lines 30+), a computer system (interpreted to include a display unit) that reads the personal information from the card and determines whether the computer system (including display) will be turned on/off (col 4, lines 10+).

Though Bilicich et al. is silent to the card includes a smart card, the Examiner notes that replacing the magnetic stripe card, with a smart card, is an obvious expedient, and well within the skill in the art. Smart cards are well known to have enhanced storage capacity and security, for example. Additionally, the Examiner notes that it is well known and conventional that displays/monitors are part of computer/display systems. As a power control means for powering a computer system (including a display) has been taught above, it interpreted as functionally equivalent, and well within the skill in the art (the Examiner is interpreting the computer system (PC 10) as the monitor as it monitors logins).

Huang et al. teaches a smart card used to power up a computer system (FIG. 1).

At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Bilicih et al. with those of Huang et al.

One would have been motivated to do this to have an access system that is more technologically advanced, therefore being able to be more secure, store more data on the cards, etc.

Re claims 5-6, the Examiner notes that it is well known and conventional that computer systems include controllers/processors, which control the systems operation. Such means are well known to produce expected results, and are therefore obvious to control a computer system. As the PC/computer discussed above includes a smart card reader and is interpreted to include a display, the Examiner notes that it is obvious to have a smart card controller and display microcomputer in order to produce expected results such as enabling the normal operation of the computer/display and card reader as is conventional in the art. Additionally, the Examiner notes that as smart cards are known to comply with ISO standards, it is obvious that the controller/card interface provide clock and reset signals (see FIG. 1 of Huang et al.). Additionally, display microcontrollers are conventional to control displaying, and as the Examiner has interpreted the PC above to include a display, it would have been obvious to one of ordinary skill in the art to have a display microcontroller to effectively control the display.

Re claim 7, Bilicih et al. teaches that personal identification information is registered (col 3, lines 32+) and stored in a storage unit. Though silent to such registering being done by reading of the card, the Examiner notes that it would have been obvious to read users cards into the system by a card reader, as opposed to manually keying in their unique identifiers, as a well

known and conventional means of assuring correctness of the data input, while also increasing the speed at which such registering is done. The Examiner notes that automated data entry via card reading, as opposed to manual input of card data is an obvious expedient. Though silent to deleting of data, the Examiner notes that it would have been obvious to one of ordinary skill in the art to delete data, based on the desired users who are given access. As it has been discussed above that desired users are registered with the system, deletion would also be an obvious expedient, to control those who have access to the system.

Re claim 10, Bilicich et al. teaches turning off the system (including display) (Step 314).

Re claim 11, the limitations have been discussed above. The Examiner notes that the display is turned off when the smart card is not inserted into the monitor after a predetermined time (immediately; step 312, FIG. 2, FIG. 3 Bilicich et al.). Further, the Examiner notes that Bilicich et al. teaches waiting predetermined amounts of time before logging a user off a system, and therefore it would have been obvious to one of ordinary skill in the art to give more/less time to the user to insert their card, before powering down, as a convenience, while still providing security (by shutting down after the time). Such modification is well within the skill in the art.

Re claim 12, though Bilicich et al./Huang et al. is silent to passive smart cards, the Examiner notes that passive smart cards (those requiring powering from an external source) are well known and conventional. One would be motivated to use passive smart cards for many reasons, including form factor constraints, longevity, reduction of parts/costs, etc. It is obvious to supply power to the card prior to reading the information, in order to be able to read the information (the card cannot be read until it is powered up). Detection of card insertion is also

well known and conventional in the art as a means to know when a card is inserted into a system, for determining system operations, for example.

Re claim 13, the limitations have been discussed above, where the card information is compared to stored information to see if a match/authorization is present.

Re claim 14, reading of personal identification information from the card has been discussed above (see claim 7-9), as an obvious alternative to manual entry of data, for convenience, speed, and accuracy. It has been discussed above that information in the computer system is used to authenticate the personal information (validate the user) and is in a storage unit.

Re claims 15 and 17, though the prior art is silent to deleting information from the storage unit, it has been discussed above that as users are granted access to the system, it would have been obvious to one of ordinary skill in the art to delete the stored information to control access to the system.

Re claim 16, the limitations have been discussed.

Re claim 23, the teachings have been discussed above. While the prior art is silent to registering the information stored from the smart card, the Examiner notes that it has been discussed above that users are entered into a system to grant them access upon subsequent card readings. The Examiner notes that it would have been obvious to one of ordinary skill in the art to enter the identification information (used to verify the users access) by reading the card as an obvious expedient to provide better accuracy and speed over manual means. Reading card data into a system inherently includes a circuit.

Re claims 24, the limitations have been discussed above. Bilicich et al./Huang et al. teach a detector circuit detecting the smart card (interface 12 Huang et al.). Though silent to a passive

card (power provided by a circuit to the smart card), the Examiner notes that it is well known and conventional to have passive/active smart cards. One of ordinary skill in the art would be motivated to use passive smart cards, for reasons that include reduction of parts, longevity of the card, reduction of card costs, etc., as discussed above. With regard to a smart card controller providing signals to/from the smart card through terminals, it is well known and conventional to do so, especially in light of ISO-7816 standards. The Examiner notes (as discussed above re claim 8), that in verifying/registering a user to log in, personal information (access information) is stored in a storage unit, when a comparison between data on a card and stored data is made (such as storing the card information in a buffer or variable in order to complete the comparison). Further, the Examiner broadly interprets the state machine 21 (Huang et al.) and PC of Bilicic et al. to include a monitor microcomputer that receives an insertion signal (signal indicating a valid card has been inserted, in order to power up the system). The Examiner has discussed above the PC/computer has been interpreted to include a monitor as is conventional in the art. Therefore, it would be obvious to include a monitor microcomputer in order to power up the display as discussed above.

Re claim 25, the limitations have been discussed above re claim 6.

Re claim 26, the limitations have been discussed above re claim 11.

Re claims 27-31, the limitations have been discussed above re claims 14-15.

3. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bilicic et al./Huang et al., as discussed above, in view of Herrero et al. (US 2005/0009520)

The teachings of Bilicic et al./Huang et al. have been discussed above.

Bilicih et al./Huang et al. are silent to deleting the information in the storage unit if the information is substantially the same as the read information.

Herrero et al. teaches when a user tries to reregister, that if the data matches, the old data is deleted (re-written) with the new data (paragraph [0015]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Bilicih et al./Huang et al. with those of Herrero et al.

One would have been motivated to do this in order to control reregistering of user information stored in the smart card and storage unit.

The Examiner notes that though Bilicih et al./Huang et al. are silent to reading the card information off the card during registering, that such means are well known and conventional (as opposed to manual entry) to provide more efficiency and reliability.

Response to Arguments

4. Re the Applicants argument that Bilicih does not teach a monitor reading a card, the Examiner notes that the claims recite that a controller reads the information, and the Examiner notes that the controller is part of the monitor, whereas the monitor is interpreted as a system that monitors logins (PC). Accordingly, the Examiner believes the Applicants argument regarding circuit and software design are moot.

Re the applicants arguments re claim 7, the Examiner notes that the controller registers identification information when users are entered into the system during a setup. Though silent to such input being done by reading of the card, the Examiner maintains that automated means of reading card data into a system (as opposed to manually entering numbers/information) is an

obvious expedient to increase speed and accuracy, and is well known and conventional in the art (credit cards, memberships, gaming cards, etc.). Accordingly, as users are designated for access by entering respective information, it would have been obvious to delete them in order to control access to a system/device.

Additionally, the Examiner notes that the PC/system/computers taught above have been interpreted as a monitor, as it monitors access/logins. The claim language of the claims does not limit the structure to display screens/monitor screens, especially as the claim language recites a display of a monitor, etc.

The Examiner believes that the new action is responsive to the arguments of the Applicant.

Allowable Subject Matter

5. Claims 18-21 are allowed.

6. The following is an examiner's statement of reasons for allowance:

Re claims 18-21, the prior art is silent to a monitor connected to a system, comprising a controller implementing an on screen display region, displaying registration and deletion buttons of the personal identification information and an authentication result from checking the personal identification information, and turning the display of the monitor on or off based on the authentication result, when the detector determines insertion of the card.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Walsh whose telephone number is (571) 272-2409. The examiner can normally be reached between the hours of 7:30am to 4:00pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone numbers for this Group is (703) 308-7722, (703) 308-7724, or (703) 308-7382.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [daniel.walsh@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Application/Control Number: 10/670,772
Art Unit: 2876

Page 10
D. Walsh

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9/2/05


Daniel Walsh